



**Application for Certification of an ADDITION ("ADD-ON") to an existing resource
as an Eligible Energy Resource Under the Delaware Renewable Energy Portfolio
Standard**

1. Name of Facility Plymouth Solar, LLC

2. Address 872 Mackeys Road, Plymouth, Washington County, NC 27962

Is the facility located within the PJM control area? ☒ Yes ☐ No
If No, does the Facility have import capabilities? ☐ Yes ☐ No

3. Name of Owner Plymouth Solar, LLC

Mailing Address 192 Raceway Drive, Mooresville, NC 28117

Phone (704) 662-0375

Fax (704) 662-0052

Email legal@sunenergy1.com

4. Name of Operator Plymouth Solar, LLC

Address 192 Raceway Drive, Mooresville, NC 28117

Phone (704) 662-0375

Fax (704) 662-0052

Email legal@sunenergy1.com

5. Name of Contact Person Lauren Gill, General Counsel

Address 192 Raceway Drive, Mooresville, NC 28117

Phone (704) 662-0375

Fax (704) 662-0052

Email legal@sunenergy1.com

6. Name of REC/SREC Owner Plymouth Solar, LLC

Address 192 Raceway Drive, Mooresville, NC 28117

Phone (704) 662-0375

Fax (704) 662-0052

Email legal@sunenergy1.com

7. List all PJM-EIS GATS State Certification Numbers assigned to this facility:
PA-27004-SUN-1, IL-33317-SUN-1, DE-97355-SUN-01-00-15

8. Operational Characteristics:

Fuel Types Used (check all that apply):

☐ Gas combustion from the anaerobic digestion of organic material

☐ Geothermal

- ☐ Ocean, wave or tidal actions, currents, or thermal differences
- ☐ Qualified Biomassⁱ
- ☐ Qualified Fuel Cellsⁱⁱ
- ☐ Qualified Hydroelectricⁱⁱⁱ
- ☐ Qualified Methane Gas captured from a landfill gas recovery system^{iv}
- ☒ Solar
- ☐ Wind

If co-firing, provide the formula on file with PJM Environmental Information Services, Inc. (PJM-EIS) N/A

Rated Capacity of **ADD-ON** (Megawatts - DC) Total capacity = 6.6623**

If multiple fuel types are utilized, attach the formula for computing the proportion of output per fuel type by megawatts per hour generated.

ADD-ON Final Approved Interconnection Date April 4, 2012

If co-firing with fossil fuels, co-fire start date n/a

If co-firing with fossil fuels, attach the allocation formula on file with PJM.

9. Is the Applicant's facility customer-sited generation^v?

☐ Yes ☒ No

Is the Applicant's facility a community owned generating facility^{vi}?

☐ Yes ☒ No

Can the output from the "ADD-ON" customer-sited generation be separately metered?

☐ Yes ☐ No n/a

Please note: Auction programs may require ADD-ONs to be separately metered.

****Please note this application is being submitted as the original application included and was approved based on an incorrect capacity. There was not an actual change in system size.**

10. If the Applicant's installation is solar or wind sited in Delaware, is a minimum of 50% of the cost of the renewable energy equipment, inclusive of mounting components, manufactured in Delaware?

☐ Yes* ☐ No n/a

Company Name of Installer

Signature of Company Representative

Address

Print Name of Co. Representative

Address

***If Yes, please attach the following documentation:**

- A copy of the supplier's invoice showing Delaware manufactured equipment with this facility identified
 - If the supplier's invoice shows only a coded Purchase Order (PO) number, a copy of the company's matching PO that includes the address where the materials were used/installed, must also be supplied
 - If using a master invoice, a record of the draws against the purchased quantity, on the master invoice, must show the address of each use and the quantity of material used

11. If the Applicant's installation is solar or wind sited in Delaware: n/a

a. Was the facility physically constructed or installed with a workforce that consists of at least 75% Delaware residents?

☐ Yes* ☐ No

b. Does the installing company employ, in total, a minimum of 75% workers who are Delaware residents?

☐ Yes* ☐ No

Company Name of Installer

Signature of Company Representative

Address

Print Name of Co. Representative

Address

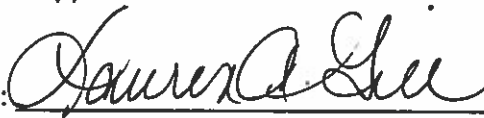
***If Yes, please attach supporting documentation (see pages 7-8 for details). Please note, in order to qualify for the Labor/Workforce Bonus, at least one of the options (a. or b.) must be met.**

I, Lauren Gill (print name) hereby certify under penalty of perjury that

1. I have made reasonable inquiry, and the information contained in this Application is true and correct to the best of my knowledge, information and belief.
2. I am authorized to submit and execute this Application and to bind myself and/or my company to the representations contained herein.
3. I /my company agree(s) to comply with and be subject to the jurisdiction of the Public Service Commission of the State of Delaware for any matters arising out of my submission of this Application or the granting of the Application.
4. In the event that any of the information contained in this Application changes pending the consideration of this Application or after the Application is granted, I/my company will amend the Application to provide the Commission with such changed information.
5. I acknowledge that if any of the representations made in this Application or in any amendment thereto are found to be untrue when made, I/the company may be subject to sanctions, including but not limited to monetary fines and/or the revocation of any Certificate granted as a result of the representations made in this Application.

Signature: _____

Date: _____



12/29/15

Required Documentation:

- If the facility is customer-sited generation, attach a copy of the “Accepted Completed Solar System Interconnection Application” for the **ADD-ON**
- One copy of U.S. Department of Energy, Energy Information Administration Form EIA-860, if rated capacity is >1.0 MW

ⁱ “Qualified Biomass” means electricity generated from the combustion of biomass that has been cultivated in a sustainable manner as determined by Delaware Department of Natural Resources and Environmental Control (DNREC), and is not combusted to produce energy in a waste to energy facility or in an incinerator.

ⁱⁱ “Qualified Fuel Cells” means electricity generated by a fuel cell powered by Renewable Fuels, as that term is defined in Section 1.0 of the Rules and Procedures to Implement the Renewable Energy Portfolio Standard, Delaware Public Service Commission Regulation Docket No. 56.

ⁱⁱⁱ “Qualified Hydroelectric” means electricity generated by a hydroelectric facility that has a maximum design capacity of 30 megawatts or less from all generating units combined that meet appropriate environmental standards as determined by DNREC.

^{iv} “Qualified Methane Gas” means electricity generated by the combustion of methane gas captured from a landfill gas recovery system; provided, however, that:

1. Increased production of landfill gas from production facilities in operation prior to January 1, 2004 demonstrates a net reduction in total air emissions compared to flaring and leakage;
2. Increased utilization of landfill gas at electric generating facilities in operation prior to January 1, 2004 (i) is used to offset the consumption of coal, oil, or natural gas at those facilities, (ii) does not result in a reduction in the percentage of landfill gas in the facility’s average annual fuel mix when calculated using fuel mix measurements for 12 out of any continuous 15 month period during which the electricity is generated, and (iii) causes no net increase in air emissions from the facility; and
3. Facilities installed on or after January 1, 2004 meet or exceed 2004 Federal and State air emission standards, or the Federal and State air emission standards in place on the day the facilities are first put into operation, whichever is higher.

^v “Customer-sited Generation” means a generating unit that is interconnected on the end use customer’s side of the retail electricity meter in such a manner that it displaces all or part of the metered consumption of the end-use customer.

^{vi} “Community-owned Energy Generating Facility” means a renewable energy generating facility that has multiple owners or customers who share the output of the generator, which may be located either as a stand-alone facility or behind the meter of a participating owner or customer. The facility shall be interconnected to the distribution system and operated in parallel with an electric distribution company’s transmission and distribution facilities.

Documentation Required for Delaware Labor/Workforce Bonus

11. If the Applicant's installation is solar or wind sited in Delaware:

- a. Was the facility physically constructed or installed with a workforce that consists of at least 75% Delaware residents?

If you answered yes to "a." above, complete the following as evidence.

The following individuals (list every employee) were employed by

Installation Company Name

as direct labor (physical construction and installation) for this facility: (Attach additional sheets if necessary)

Please complete the following information for all individuals listed above:

Name	Home Address City, State only (As per Tax Withholding)	Social Security Number (Last 2 digits only)

Total Delaware Resident Employees: _____ **Total Number of Employees:** _____

% of Delaware Residents (Delaware Residents Divided by Total Employees): _____

Documentation Required for Delaware Labor/Workforce Bonus

11. If the Applicant's installation is solar or wind sited in Delaware:

- b. Does the installing company employ, in total, a minimum of 75% of workers who are Delaware residents?

If you answered yes to "b." above, complete the following as evidence:

Installation Company Name

employed the following individuals (list EVERY employee on the payroll during the period from project start date until project completion date). Projects are considered complete upon final interconnection approval to operate. (Attach additional sheets if necessary)

Project Start Date: _____ Project Complete Date: _____

Employee Full Name	Home Address City, State Only (As per Tax Withholding)	Social Security Number (Last 2 digits Only)

Total Delaware Resident Employees: _____ **Total Number of Employees:** _____

% of Delaware Residents (Delaware Residents Divided by Total Employees): _____

NORTH CAROLINA INTERCONNECTION REQUEST

Utility: Dominion Power

Designated Contact Person: Kenny Habul

Address: 1178 C River Highway, Suite C, Mooresville, NC 28117

Telephone Number: 704-662-0375

Fax: 704-662-0052 E-Mail Address: kenny@sunenergy1.com

An Interconnection Request is considered complete when it provides all applicable and correct information required below.

Preamble and Instructions

An Interconnection Customer who requests a North Carolina Utilities Commission jurisdictional interconnection must submit this Interconnection Request by hand delivery, mail, e-mail, or fax to the Utility.

Request for: Fast Track Process ☐ Study Process ☒
(All Generating Facilities larger than 2 MW must use the Study Process.)

Processing Fee or Deposit

Fast Track Process – Non-Refundable Processing Fees

- If the Generating Facility is 20 kW or smaller, the fee is \$100.
- If the Generating Facility is larger than 20 kW but not larger than 100 kW, the fee is \$250.
- If the Generating Facility is larger than 100 kW but not larger than 2 MW, the fee is \$500.

Study Process – Deposit

If the Interconnection Request is submitted under the Study Process, whether a new submission or an Interconnection Request that did not pass the Fast Track Process, the Interconnection Customer shall submit to the Utility a deposit not to exceed \$1,000 towards study costs.

Change in Ownership – Non-Refundable Processing Fee

If the Interconnection Request is submitted solely due to a transfer of ownership of the Generating Facility, the fee is \$50.

Interconnection Customer Information

Legal Name of the Interconnection Customer (or, if an individual, individual's name)

Name: Plymouth Solar, LLC
Contact Person: Kenny Habul
Mailing Address: 1178 C River Highway
City: Mooreville State: NC Zip: 28117
Facility Location (if different from above): Adj. to 382 Industrial Drive, Plymouth, NC
Telephone (Day): 704-662-0375 Telephone (Evening): _____
Fax: 704-662-0052 E-Mail Address: kenny@sunenergy1.com

Alternative Contact Information (if different from the Interconnection Customer)

Contact Name: Vickie L. Harris, NCCP
Title: Customer Relations Executive
Address: 1178 C River Highway
Mooreville, NC 28117
Telephone (Day): 704-662-0375 Telephone (Evening): 704-640-1692
Fax: 704-662-0052 E-Mail Address: vickie.harris@sunenergy1.com

Application is for: ☒ New Generating Facility
☐ Capacity Addition to Existing Generating Facility
☐ Transfer of Ownership of Existing Generating Facility

If capacity addition to existing Generating Facility, please describe: _____

Will the Generating Facility be used for any of the following?

Net Metering? Yes ☐ No ☒

To Supply Power to the Interconnection Customer? Yes ☐ No ☒

To Supply Power to the Utility? Yes ☒ No ☐

To Supply Power to Others? Yes ☐ No ☒

(If yes, discuss with the Utility whether the interconnection is covered by the NC Interconnection Standard.)

For installations at locations with existing electric service to which the proposed Generating Facility will interconnect, provide:

(Local Electric Service Provider*)

(Existing Account Number*)

[*To be provided by the Interconnection Customer if the local electric service provider is different from the Utility]

Contact Name: _____

Title: _____

Address: _____

Telephone (Day): _____ Telephone (Evening): _____

Fax: _____ E-Mail Address: _____

Requested Point of Interconnection: 33.5 kV line adjacent to property _____

Interconnection Customer's Requested In-Service Date: December 31, 2011 _____

Generating Facility Information

Data apply only to the Generating Facility, not the Interconnection Facilities.

Energy Source: Solar ☒ Wind ☐ Hydro ☐ Hydro Type (e.g. Run-of-River): _____
Diesel ☐ Natural Gas ☐ Fuel Oil ☐ Other (state type) _____

Prime Mover: Fuel Cell ☐ Recip Engine ☐ Gas Turbine ☐ Steam Turbine ☐
Microturbine ☐ PV ☒ Other _____

Type of Generator: Synchronous ☐ Induction ☒ Inverter ☒

Generator Nameplate Rating: ⁵⁰⁰ kW (Typical) Generator Nameplate: _____ kVAR

Interconnection Customer or Customer-Site Load: ^{none} kW (if none, so state)

Typical Reactive Load (if known): ^{n/a}

Maximum Physical Export Capability Requested: ⁴⁹⁹⁰ kW

List components of the Generating Facility equipment package that are currently certified:

	Equipment Type	Certifying Entity
1.	Bosch 240 watt Solar Panels	UL 1703
2.	Xantrex GT 500 MV-208 Electric Inverter	UL 1741
3.	Solar BOS Combiner Box	UL 1741
4.	Daetwyler Racking System	
5.		

Is the prime mover compatible with the certified protective relay package? Yes ☒ No ☐

Generator (or solar collector)

Manufacturer, Model Name, & Number: ^{Bosch 240 WP}

Version Number: _____

Nameplate Output Power Rating in kW: (Summer) ^{240 (dc)} (Winter) ^{240 (dc)}

Nameplate Output Power Rating in kVA: (Summer) _____ (Winter) _____

Individual Generator Power Factor

Rated Power Factor: Leading: _____ Lagging: _____

Total Number of Generators in wind farm to be interconnected pursuant to this Interconnection Request: _____ Elevation: _____

Single phase ☒ Three phase ☐

Inverter Manufacturer, Model Name, & Number (if used): _____

List of adjustable set points for the protective equipment or software: _____

Note: A completed Power Systems Load Flow data sheet must be supplied with the Interconnection Request.

Generating Facility Characteristic Data (for inverter-based machines)

Max design fault contribution current: 1532.2 amps Instantaneous ____ or RMS? ____

Harmonics Characteristics: _____

Start-up requirements: _____

Generating Facility Characteristic Data (for rotating machines)

RPM Frequency: _____

(*) Neutral Grounding Resistor (if applicable): _____

Synchronous Generators:

Direct Axis Synchronous Reactance, X_d : _____ P.U.

Direct Axis Transient Reactance, X'_d : _____ P.U.

Direct Axis Subtransient Reactance, X''_d : _____ P.U.

Negative Sequence Reactance, X_2 : _____ P.U.

Zero Sequence Reactance, X_0 : _____ P.U.

KVA Base: _____

Field Volts: _____

Field Amperes: _____

Induction Generators:

Motoring Power (kW): _____

I_2^2t or K (Heating Time Constant): _____

Rotor Resistance, R_r : _____

Stator Resistance, R_s : _____

Stator Reactance, X_s : _____

Rotor Reactance, X_r : _____

Magnetizing Reactance, X_m : _____

Short Circuit Reactance, X_d'' : _____

Exciting Current: _____

Temperature Rise: _____

Frame Size: _____

Design Letter: _____

Reactive Power Required In Vars (No Load): _____

Reactive Power Required In Vars (Full Load): _____

Total Rotating Inertia, H: _____ Per Unit on kVA Base

Note: Please contact the Utility prior to submitting the Interconnection Request to determine if the specified information above is required.

Excitation and Governor System Data for Synchronous Generators Only

Provide appropriate IEEE model block diagram of excitation system, governor system and power system stabilizer (PSS) in accordance with the regional reliability council criteria. A PSS may be determined to be required by applicable studies. A copy of the manufacturer's block diagram may not be substituted.

Interconnection Facilities Information

Will a transformer be used between the generator and the point of common coupling?

Yes ☒ No ☐

Will the transformer be provided by the Interconnection Customer? Yes ☒ No ☐

Transformer Data (if applicable, for Interconnection Customer-owned transformer):

Is the transformer: Single phase ☐ Three phase ☒ Size: ⁵⁰⁰_____ kVA

Transformer Impedance: _____ % on _____ kVA Base

If Three Phase:

Transformer Primary: ³³⁵⁰⁰_____ Volts _____ Delta ^X_____ Wye _____ Wye Grounded

Transformer Secondary: ²⁰⁸_____ Volts _____ Delta ^X_____ Wye _____ Wye Grounded

Transformer Tertiary: _____ Volts _____ Delta _____ Wye _____ Wye Grounded

Transformer Fuse Data (if applicable, for Interconnection Customer-owned fuse):

(Attach copy of fuse manufacturer's Minimum Melt and Total Clearing Time-Current Curves)

Manufacturer: _____ Type: _____ Size: _____ Speed: _____

Interconnecting Circuit Breaker (if applicable):

Manufacturer: _____ Type: _____

Load Rating (Amps): _____ Interrupting Rating (Amps): _____ Trip Speed (Cycles): _____

Interconnection Protective Relays (if applicable):

If Microprocessor-Controlled:

List of Functions and Adjustable Setpoints for the protective equipment or software:

Setpoint Function	Minimum	Maximum
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____
6. _____	_____	_____

If Discrete Components:

(Enclose Copy of any Proposed Time-Overcurrent Coordination Curves)

Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____

Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____

Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____

Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____

Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____

Current Transformer Data (if applicable):

(Enclose Copy of Manufacturer's Excitation and Ratio Correction Curves)

Manufacturer: _____

Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

Manufacturer: _____

Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

Potential Transformer Data (if applicable):

Manufacturer: _____

Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

Manufacturer: _____

Type: _____ Accuracy Class: _____ Proposed Ratio Connection: _____

General Information

Enclose copy of site electrical one-line diagram showing the configuration of all Generating Facility equipment, current and potential circuits, and protection and control schemes. This one-line diagram must be signed and stamped by a licensed Professional Engineer if the Generating Facility is larger than 50 kW.

Is One-Line Diagram Enclosed? Yes ☒ No ☐

Enclose copy of any site documentation that indicates the precise physical location of the proposed Generating Facility (e.g., USGS topographic map or other diagram or documentation).

Proposed location of protective interface equipment on property (include address if different from the Interconnection Customer's address) _____

Enclose copy of any site documentation that describes and details the operation of the protection and control schemes. Is Available Documentation Enclosed? Yes ☒ No ☐

Enclose copies of schematic drawings for all protection and control circuits, relay current circuits, relay potential circuits, and alarm/monitoring circuits (if applicable).

Are Schematic Drawings Enclosed? Yes ☒ No ☐

Applicant Signature

I hereby certify that, to the best of my knowledge, all the information provided in this Interconnection Request is true and correct.

For Interconnection Customer:  Date: 11-14-11

NOTICE: This report is mandatory under the Federal Energy Administration Act of 1974 (Public Law 93-275). Failure to comply may result in criminal fines, civil penalties and other sanctions as provided by law. For further information concerning sanctions and data protections see the provision on sanctions and the provision concerning confidentiality of information in the instructions. Title 18 USC 1001 makes it a criminal offense for any person knowingly and willingly to make to any Agency or Department of the United States any false, fictitious, or fraudulent statements as to any matter within its jurisdiction.

SCHEDULE 1. IDENTIFICATION

Survey Contact

Contact Person: Maria Childers
Title: Associate Corporate Counsel
Address: 192 Raceway Drive

City/State/Zip: Mooresville NC 28117
Email: legal@sunenergy1.com
Telephone: (704) 662-0375 Ext. 104 Fax: (704) 662-0052 cell

Supervisor for Contact Person for Survey

Contact Person: Kenny Habul
Title: CEO
Address: 192 Raceway Drive

City/State/Zip: Mooresville NC 28117
Email: kenny@sunenergy1.com
Telephone: (704) 677-0375 Ext. 175 Fax: Cell

REPORT FOR: Operator SunEnergy1 58466

Reporting as of December 31 2014

Name and Address of reporting Entity

Operator Legal Name: SunEnergy1
Address: 192 Raceway Dr

City/State/Zip: Mooresville NC 28117

What is the reporting entity's relationship to the power plants reported on Schedule 2?
- check all that apply.

- ☒ Owner
☐ Operator
☐ Asset Manager
☐ Other - Explain

What type of entity is the principal owner and/or operator for the power plants reported on this form ?
- check one.

- ☐ Cooperative
☐ Investor-Owned Utility(IOU)
☒ Independent Power Producer(IPP)
☐ Municipally-Owned Utility
☐ Political Subdivision
☐ Federally-Owned Utility
☐ State-Owned Utility
☐ Industrial (principal business is not electricity generation)
☐ Commerical (principal business is not electricity generation)

REPORT FOR OPERATOR: SunEnergy1 58466
Reporting as of December 31, 2014

SCHEDULE 2. POWER PLANT DATA
(EXISTING POWER PLANTS AND THOSE PLANNED FOR INITIAL OPERATION WITHIN 10 YEARS)

EIA Plant Code	58480
1. Plant Name	Plymouth Solar LLC
2. Plant Address	Mackey's Rd and Industrial Par Washington NC 27962 Plymouth
3. Latitude/Longitude	35.875 Plant Longitude (in decimal format) -76.710556
4. NERC Region	SERC
5. What is this plant's balancing authority	14725 PJM NC PJM Interconnection, LLC
6. Name Of Water Source (For Purpose of C	
7. Steam Plant_type	(4) Plants with non-steam fueled generators (wind, PV, geothermal, fuel cell, combustion turbines, IC engines, etc.) and electric generators not meeting conditions of categories above.
8a. Primary Purpose of the Plant (North American Industry Classification System Code)	22
8b. Does this plant have a Net Metering Agreement	
9a. Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Cogenerator status? If Yes, provide all QF docket number(s). Separate by using a comma.	N
9b.	
10a. Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) small Power Producer status? If Yes, provide all QF docket number(s). Separate by using a comma.	Y
10b. QF12-162-000	
11a. Does this plant have Federal Energy Regulatory Commission (FERC) Qualifying Facility (QF) Exempt Wholesale Generator status? If Yes, provide all QF docket number(s). Separate by using a comma.	N
11b.	
12a. Is there an ash impoundment (e.g. pond, reservoir) at the plant?	N
12b. Is this impoundment lined? X 12c. What was the ash impoundment status as of 12/31 of the reporting year?	
13. Owner of Transmission and/or Distribution Facilities: Enter the name of the owner of the transmission or distribution facilities to which the plant is interconnected and the grid voltage at the point of interconnection.	
Dominion Energy Inc	
5248 VA	
14. Grid Voltage in kilovolts 34.5 kV	kV kV
15a. Reserved for future use.	
15b. Reserved for future use	
16. What is the name of the natural gas pipelines(s) that is connected to your facility?	
17. Plant Long Name	

Plant Notes

SCHEDULE 3. PART A. GENERATOR INFORMATION - GENERATORS
(EXISTING GENERATORS AND THOSE PLANNED FOR INITIAL COMMERCIAL OPERATION WITHIN 10 YEARS)
(Complete One Column for Each Generator, by Plant)

Report For Operator: 58466 SunEnergy1

Report as of December 31 2014

Plant Name Plymouth Solar LLC

EIA Plant Code 58480

1. What is the generator ID for this generator?

- Generator ID is the identification most commonly used by plant management to reference this generator.
- Enter unique ID for each generator.

I

2 What is this generator's prime mover?

- Select prime mover code from Table 2 in SCHEDULE 3, Part A Instructions.
- For combined cycle units, enter a prime mover code for each generator.

PV

3. What is this generator's unit or multi-generator code?

- A unit of multi-generator code is the unique 4-character code associated with multiple generators that operate as a single unit (such as a combined cycle unit)
- Each generator operating as a single unit should have the same unit or multi-generator code.
- Leave blank if this generator does not operate as a single unit with another generator.

4. What is this generator's ownership code?

- See Table 3 in SCHEDULE 3, Part A instructions for list of ownership codes.

S

5. Does this generator have duct burners for the supplementary firing of the turbine exhaust gas?

- Answer only for generators with a combined cycle prime mover codes of CA, CS or CC.

Yes ☐

No ☐

6. Can this generator operate while bypassing the heat recovery steam generator?

- Answer only for generators with a combined cycle prime mover code of CT or CC.

Yes ☐

No ☐

7a. For this generator what is the RTO/ISO LMP price node designation?

- If this generator operates in an electric system operated by a Regional Transmission Organization (RTO) or Independent System Operator (ISO) and the RTO/ISO calculates a nodal Locational Marginal Price (LMP) at the generator location, then provide the nodal designation used to identify the price node in RTO/ISO LMP price reports.

7b. For this generator what is the RTO/ISO location designation for reporting wholesale sales data to FERC?

- If this generator operates in an electric system operated by a Regional Transmission Organization (RTO) or Independent System Operator (ISO) and the generator's wholesale sales transaction data is reported to FERC for the Electric Quarterly Report, then provide the designation used to report the specific location of the wholesale sales transaction to FERC. In many cases the RTO/ISO location designation may be the same as the RTO/ISO LMP price node

SCHEDULE 3. PART B. GENERATOR INFORMATION - OPERABLE GENERATORS

Complete one SCHEDULE 3, Part B for each generator at this plant that is in commercial operation or capable of commercial operation.

Report For Operator: SunEnergy1

58466

Reporting as of December 31, 2014

Plant Name Plymouth Solar LLC

Generator ID

EIA Plant Code 58480

1a. What is this generator's nameplate capacity?

(Megawatts)

5.0

-Report the highest value in megawatts as measured in alternating current.

-If capacity is expressed in kilovolt amperes, convert to megawatts using formula in SCHEDULE 3, Part B instructions.

-Round nameplate capacity to the nearest tenth.

1b. What is this generator's nameplate power factor?

(Megawatts)

-Use the same power factor as the one used to convert the generator's kilovolt ampere measure to megawatts in Question 1a.

-Solar photovoltaic systems, wind turbine, batteries, fuel cells, and flywheels may skip this question.

2. What is this generator's net capacity?

-Report net summer capacity and net winter capacity for primary fuel source.

-Report in megawatts as measured in alternating current.

-Round capacity to the nearest tenth.

-If the net summer capacity exceeds the nameplate capacity reported for Question 1A, explain in SCHEDULE 7.

-For solar photovoltaic generators report the peak net capacity during the day for the generator assuming clear sky conditions for summer capacity and on December 21 for winter capacity.

Net summer capacity

(Megawatts)

5.0

Net winter capacity

(Megawatts)

3.0

3. What minimum load can this generator operate at continuously?

-Solar generators may skip this question

-For generators that entered a unit code on SCHEDULE 3, Part A report load when all generators are operating at minimum load.

4a. Was an uprate or derate project completed on this generator during the reporting year?

Yes - Continue to Question 4b

Yes ☐

No - Continue to Question 5

No ☒

4b. When was this uprate or derate project completed?

/

5a. What was the status of this generator as of December 31 of the reporting year?

-Select the status code from Table 4 in SCHEDULE 3, Part B of the instructions.

-If Status code is SB, go to Question 5b.

-For all other status codes, go to Question 6.

OP

5b. Is this generator equipped to be synchronized to the grid?

Yes ☐ No ☐

-Answer only if the status code reported in question 5a is SB.

6. When did this generator begin commercial operation?

(MM-YYYY)

9/2012

7. When was this generator retired?

(MM-YYYY)

/

8. If this generator will be retired in the next ten years, what is its estimated retirement date?

(MM-YYYY)

/

9. Is this generator associated with a combined heat and power system?

Yes - Continue to Question 10

Yes ☐

No - Continue to Question 11

No ☒

10. Is this generator part of a topping or bottoming cycle?

-In a topping cycle, electricity is produced first and any waste heat from that production is used in a manufacturing or commercial application.

-In a bottoming cycle, thermal output is used in a process other than electricity production and any waste heat is then used to produce electricity.

Topping ☐Bottoming ☐

11. What is this generator's predominant energy source?

-Enter the energy source code for the fuel used by this generator in the greatest quantity during the reporting year, as measured in Btus.

-Select this energy source code from Table 28 in the instructions.

SUN

12. What are the energy sources used by this generator's combustion units for start-up and flame stabilization?

-Answer only for generators whose prime mover code was ST (Steam turbine.)

-Enter the energy source code for the fuel used by this generator for start-up and flame stabilization during the reporting year, as measured in Btus.

-Select this energy source code from Table 28 in the instructions.

a. b.
c. d.

SCHEDULE 3. PART B. GENERATOR INFORMATION - EXISTING GENERATORS

Report For Operator: SunEnergy1

58466

Reporting as of December 31, 2014

Plant Name Plymouth Solar LLC

Plant Code 58480 Generator ID

1

13. What is this generator's second most predominant energy source?

-Enter the energy source code for the fuel used by this generator in the second quantity during the reporting year, as measured in Btus.

-DO NOT include fuel used only for start-up or flame stabilization

-Select this energy source code from Table 28 in the instructions.

14. What other energy sources are used by the generator?

-Enter the energy source code for all other fuels this generator either used or was capable of using during the reporting year, as measured in Btus. Begin with those actually used and then provide those capable of being used.

-Select this energy source code from Table 28 in the instructions.

15. Is this generator part of a solid fuel gasification system?

Yes ☐ No ☐

16. What is the tested heat rate for this generator?

-The tested heat rate is the fuel consumed, in Btus, necessary to generate one net kilowatt-hour of electric energy.

-Enter the tested heat rate under full load conditions for all combustible-fueled and nuclear-fueled generators.

-See SCHEDULE 3, Part B instructions for additional guidance on reporting the tested heat rate.

17. What fuel was used to determine this generator's tested heat rate?

-Enter the energy source code for the fuel used to calculate the tested heat rate entered in Question 16.

-Select energy source code from Table 28 in the instructions.

-Enter "M" if multiple fuels were used to calculate the tested heat rate.

18. Is the generator associated with a carbon capture process?

Yes ☐ No ☐

19. How many wind turbines, inverters, or hydrokinetic buoys are there at this generator?

-Wind generators should enter the number of wind turbines.

-Solar photovoltaic generators should enter the number of inverters.

-Hydrokinetic generators should enter the number of hydrokinetic buoys.

-All other generators should enter 0.

20. RESERVED FOR FUTURE USE

21. What is the minimum amount of time required to bring this generator from cold shut down to full load?

-Solar and wind generator should skip this question

- ☐ 0 - 10 minutes
☐ 10minutes - 1 hour
☐ 1 hour - 12 hours
☐ More than 12 hours

SCHEDULE 3. PART B. GENERATOR INFORMATION - EXISTING GENERATORS

Report For Operator: SunEnergy1

58466

Reporting as of December 31, 2014

Plant Name Plymouth Solar LLC

Plant Code 58480

Generator ID

22. What is the minimum amount of time needed to bring this generator from a non-spinning reserve status to full load?

-Solar and wind generator should skip this question.

Answer questions on lines 23 and 24 only if generator is fueled by coal or petroleum

23. What combustion technology applies to this generator?

Fluidized Bed

Pulverized Coal

Stoker

Other - Explain in SCHEDULE 7

24. What steam condition apply to this generator?

Sub-Critical

Super-Critical

Ultra Super-Critical

Answer questions on lines 25 through 29 only if generator is wind-powered

25. What is the predominant manufacturer of the turbines at this generator?

-Enter "UNKNOWN" if the predominant turbine manufacturer is unknown.

26. What is the predominant model number of the turbines at this g

-Enter "UNKNOWN" if the predominant model number is unknown.

27a. What is the design average annual wind speed for the turbines included in this generator?

(Miles per hour)

-If more than one value exists, select the one that best represents the turbines.

27b. What is the wind quality class for the turbines included in this generator?

-See Table 5 in the SCHEDULE 3, Part B instructions for wind class definitions.

-If more than one wind class exists, select the one that best represents the turbines.

28. What is the hub height of the turbines in this generator?

-If this generator consists of turbines with multiple hub heights, select the one that best represents the turbines.

29. What is the FAA Obstacle Number assigned to the turbines at this generator?

-If this generator consists of turbines with multiple FAA Obstacle Numbers, select the one that best represents the turbines.

30. What are the solar tracking, concentrating and collector technologies used at this generator?

-Choose the technology that best describes this generator.

31. What is the net capacity of this photovoltaic generator in direct current (DC) under standard test conditionas (STC) of 1000 W/m2 solar irradiance and 25 degree Celsius PV module temperature?

(Megawatts)

32. What materials are the photovoltaic panels included in this generator made of? (Select all that apply.)

1

- ☐ 0 - 10 minutes
☐ 10minutes - 1 hour
☐ 1 hour - 12 hours
☐ More than 12 hours

- ☐ Yes ☐ No
☐ Yes ☐ No
☐ Yes ☐ No
☐ Yes ☐ No

- ☐ Yes ☐ No
☐ Yes ☐ No
☐ Yes ☐ No

- ☐ Class 1 - High Wind
☐ Class 2 - Medium Wind
☐ Class 3 - Low Wind
☐ Class 4 - Very Low Wind

- ☐ Lenses/Mirror ☐ Parabolic ☐ Other
☐ Single Axis ☐ Linear Fresnel
☐ Dual Axis ☐ Power Tower
☒ Fixed Tilt ☐ Dish Engine

6.5

- ☒ Crystalline Silicon ☐ Thin-Film (CIGS)
☐ Thin-Film (CdTe) ☐ Thin-Film (Other)
☐ Thin-Film (A-Si) ☐ Other

SCHEDULE 3. PART B. GENERATOR INFORMATION - EXISTING GENERATORS

Report For Operator: 58466 SunEnergy1

Reporting as of December 31, 2014

Plant Name Plymouth Solar LLC

Plant Code 58480

PROPOSED CHANGES TO EXISTING GENERATORS

Generator ID

If a capacity uprate is planned within the next 10 years, answer Questions 33a - 33c.

33a. What is the expected incremental increase in the net summer capacity? (Megawatts)

33b. What is the expected incremental increase in the net winter capacity? (Megawatts)

33c. What is the planned effective date for this capacity uprate? (MM-YYYY)

If a capacity derate is planned within the next 10 years, answer Questions 34a - 34c.

34a. What is the expected incremental decrease in the net summer capacity? (Megawatts)

34b. What is the expected incremental decrease in the net winter capacity? (Megawatts)

34c. What is the planned effective date for this capacity derate? (MM-YYYY)

If a repowering of this generator is planned within the next 10 years, answer Questions 35a - 35d.

35a. What is the expected new prime mover for this generator?

-Select prime mover code from Table 2 in the SCHEDULE 3, Part A of the Instructions.

35b. What is the expected new energy source for this generator?

-Select this energy source code from Table 28 in the instructions.

35c. What is the expected new nameplate capacity for this generator? (Megawatts)

-Report the expected value in megawatts as measured in alternating current.

-If capacity is expressed in kilovolt amperes, convert to megawatts using formula in SCHEDULE 3, Part B instruction line 1a.

-Round nameplate capacity to the nearest tenth.

35d. What is the planned effective date for this repowering? (MM-YYYY)

-The planned effective date is the date that this generator is scheduled to re-enter operation after the modification.

All respondents should answer questions 36a.

36a. Are any other modifications planned within the next 10 years?

☐ Yes - Explain in SCH 7

☐ No

If other planned modifications for this generator were indicated in Question 36a., then answer Question 36b.

36b. What is the planned date of these other modifications?

All respondents should answer question 37a.

37a. Can this generator co-fire fuels?

Note: Co-firing means the simultaneous use of two or more fuels by a single combustion system to meet load. Co-firing excludes the limited use of a secondary fuel for start-up or flame stabilization.

☐ Yes

☐ No

SCHEDULE 3. PART B. GENERATOR INFORMATION - EXISTING GENERATORS

Report For Operator: 58466 SunEnergy1
Reporting as of December 31, 2014
Plant Name Plymouth Solar LLC
Plant Code 58480 Generator ID

If this generator can co-fire fuels, answer Question 37b.

37b. What are the fuel options for co-firing?

-Skip this question if the generator cannot co-fire fuels.

All respondents should answer Question 38a.

38a. Can this generator switch between oil and natural gas?

Note: Fuel switching means the ability of a combustion system running on one fuel to replace that fuel in its entirety with a substitute fuel. Fuel switching excludes the limited use of a secondary fuel for start-up or flame-stabilization.

-Answer yes if the combustion system that powers this generator has, in operating order, the equipment AND the regulatory permits necessary to do so.

☐ Yes
☐ No

If this generator can switch between oil and natural gas, answer Question 38b - 42b.

38b. Can this generator switch between oil and natural gas when operating?

-Skip this question if the generator cannot switch between oil and natural gas.

☐ Yes
☐ No

39a. What is the maximum net summer output achievable when running on natural gas? (Megawatts)

-When providing this figure take into account all applicable legal, regulatory, and technical limits.

39b. What is the maximum net winter output achievable when running on natural gas? (Megawatts)

-When providing this figure take into account all applicable legal, regulatory, and technical limits.

40a. What is the maximum net summer output achievable when running on oil? (Megawatts)

-When providing this figure take into account all applicable legal, regulatory, and technical limits.

40b. What is the maximum net winter output achievable when running on oil? (Megawatts)

-When providing this figure take into account all applicable legal, regulatory, and technical limits.

41a. How much time is required to switch the generator from using 100 percent natural gas to 100 percent oil?

41b. How much time is required to switch this generator from using 100 percent oil to using 100 percent natural gas?

42a. Are there factors that limit this generator's ability to switch from natural gas to oil or from oil to natural gas?

☐ Yes
☐ No

42b. Which factors limit this generator's ability to switch from natural gas to oil or from oil to natural gas?

-Select all that apply.

Limited On-Site Fuel Storage ☐ Yes ☐ No
Air Permit Limits ☐ Yes ☐ No
Other-Explain in SCHEDULE 7 ☐ Yes ☐ No

SCHEDULE 3. PART C. GENERATOR INFORMATION - PROPOSED GENERATORS

Report For Operator : SunEnergy1

Reporting as of December 31, 2014 58466

Plant Name Plymouth Solar LLC

EIA Plant Code 58480

Generator ID

1

1a. What is the expected nameplate capacity for this generator?

- Report the highest value in megawatts as measured in alternating current.
- If capacity is expressed in kilovolt amperes, convert to megawatts using formula in SCHEDULE 3, Part C of the instructions.
- Round nameplate capacity to the nearest tenth.

1b. What is this generator's expected nameplate power factor?

- Use the same power factor as the one used to convert the generator's kilovolt ampere measure to megawatts in Question 1a.

2. What is the expected net capacity for this generator?

- Report the expected net summer capacity and expected net winter capacity for primary fuel
- Report in megawatt as measured in alternating current.
- Round capacity to the nearest thenth.

Expected Net summer capacity Megawatts

Expected Net winter capacity Megawatts

3. What was the status of this proposed generator as of December 31 of the reporting year?

- Select a status code from those listed in Table 6, SCHEDULE 3, Part C Instructions.

**4. What is the planned original effective date for this generator?
(MM-YYYY)**

- The planned original effective date is the date that the generator was scheduled to enter operation after construction was completed.
- This date should only be reported once, and should not change once it is reported.

**5. What is the planned current effective date for this generator?
(MM-YYYY)**

- The planned current effective date is the date that this generator is scheduled to start operation.

6. Will this generator be associated with a combined heat and power system?

☐ Yes ☐ No

7. Is this generator part of a site that was previously reported as indefinitely postponed or cancelled?

☐ Yes
☒ No

8. What is the predominant expected energy source for this generator?

- Enter the energy source code for the fuel used in the greatest quantity to fuel this generator, as measured in Btus.
- Select this energy source code from Table 28 in the instructions.

9. What is the second most predominant expected energy source for this generator?

- Enter the energy source code for the fuel expected to be used in the second greatest quantity to fuel this generator, as measured in Btus.
- Select this energy source code form Table 28 in the instructions.

SCHEDULE 3. PART C. GENERATOR INFORMATION - PROPOSED GENERATORS

Report For Operator: 58466 SunEnergy1
Reporting as of December 31, 2014

Plant Name Plymouth Solar LLC

EIA Plant Code 58480

Generator ID

1

10. What other energy sources do you expect to use for this generator?

-Enter the energy source codes for all other fuels you expect this generator to use in descending order as measured in Btu.
-Select energy source code(s) from Table 28 in the instructions.

11. How many turbines, photovoltaic modules, or hydrokinetic buoys is this generator expected to have?

12. What combustion technology will apply to this generator?

-Answer only if this generator will be fueled by coal or petroleum coke.

Fluidized Bed

Pulverized Coal

Other - Explain in SCHEDULE 7

13. What steam conditions will apply to this generator?

-Answer only if this generator will be fueled by coal or petroleum coke.

Sub-Critical

Super-Critical

Ultra Super-Critical

14. Will this generator be part of a solid fuel gasification system?

☐ Yes ☐ No

15. Will this generator be associated with a carbon dioxide capture p

☐ Yes ☐ No

Note: Co-firing means the simultaneous use of two or more fuels by a single combustion system to meet load. Fuel switching means the ability of a combustion system running on one fuel to replace that fuel in its entirety with a substitute fuel. Co-firing and fuel switching exclude the limited use of a secondary fuel for start-up or flame stabilization.

16. Will the combustion system that powers this generator be able to switch between natural gas and oil?

☐ Yes ☐ No

17a. Will this generator co-fire fuels?

☐ Yes ☐ No

17b. What will be the fuel options for co-firing?

-Select up to six energy source code(s) from Table 28 in the instructions.

REPORT FOR OPERATOR SunEnergy1 58466
Reporting as of December 31, 2014

SCHEDULE 7. FOOTNOTES

SCHEDULE (a)	PART	LINE NUMBER (b)	NOTES: (c)
-----------------	------	-----------------------	---------------

EIA-860 Error Report Log

Report For SunEnergy1 58466

REPORTING PERIOD: As of December 31, 2014

Plant	Gen	Sched	Part	ID	Line	Error#	Error Description / Override Comment	Field Value	Error Type
-------	-----	-------	------	----	------	--------	--------------------------------------	-------------	------------